

**CLEAN WATER ACT BASE 106 GRANT APPLICATION**

**WATER POLLUTION CONTROL PROGRAM**

**FY2013-FY2014 FEDERAL FUNDING**

**CLEAN WATER BRANCH**

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**CLEAN WATER ACT (CWA) BASE 106  
WATER POLLUTION CONTROL PROGRAM  
FY2013-FY2014 FEDERAL FUNDING**

**EXECUTIVE SUMMARY**

Goals, Program Objectives, Sub-objectives, and Targets: The program goals for **federal environmental protection Goal 2 (Clean and Safe Water) and related State Department of Health (DOH)** are listed below.

**Environmental Health Administration (EHA) Existing Goals, Indicators, Measures of Effectiveness (MOE)**

**1. State Water Goal:**

- **To ensure that Hawaii's coastal waters are safe and healthy for people, plants and animals**
- **To protect and restore the quality of Hawaii's streams, wetlands, estuaries and other inland waters for fish and wildlife, recreation, aesthetic enjoyment and other beneficial uses**

**Environmental Indicators:**

- **Shoreline postings due to sewage or other water pollution**
- **Percentage of wastewater recycled annually**
- **Wastewater treatment plant operations and maintenance compliance record**
- **Beach closure/warning days annually due to sewage or water pollution**
- **Number of impaired streams listed**

**Measures of Effectiveness:**

- **Percent of wastewater dischargers in compliance with permits, healthy for people and the environment**
- **Percent of marine recreational sites in compliance with rules**

## **Environmental Protection Agency (EPA) Existing Goals and Objectives**

### **2. EPA GOALS: EPA Goals from: 2006-2011 Strategic Plan**

#### **GOAL 2: Clean and Safe Water**

#### **GOAL 4: Healthy Communities and Ecosystems**

#### **GOAL 5: Compliance and Environmental Stewardship**

#### **EPA GOAL 2 Objectives:**

- 2.1. **Protect Human Health:** Protect human health by reducing exposure to contaminants in drinking water, in fish and shellfish, and in recreational waters.
  - Water safe for swimming.
- 2.2. **Protect Water Quality:** Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
  - Improve water quality on a watershed basis.
  - Improve coastal and ocean waters.
- 2.3. **Enhance Science and Research:** Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.
  - Apply best available science.
- 4.3. **Ecosystems**
  - Protect and restore ecosystems.
  - Increase wetlands.

4.4. **Enhance Science and Research**

- Apply the best available science.

5.1. **Improve Compliance**

- Compliance assistance.
- Compliance incentives.
- Monitoring and enforcement.

5.2. **Improve Environmental Performance through Pollution Prevention and Innovation**

- Prevent pollution and promote environmental stewardship by government and the public.
- Prevent pollution and promote environmental stewardship by business.
- Business and community innovation.
- Environmental policy innovation.

Federal EPA Goal from: 2006-2011 EPA Strategic Plan  
Environmental Indicators from: 2010 HIOH-EHA Indicators of Environmental Health  
Performance Assessment Measures from: FY 2010 EPA National Water Program Guidance

**HUMAN RESOURCES**  
**Personnel Assignment**

Name	Position	Permitting Months	Compliance Months	Monitoring Months
<b>Administration:</b>				
Wong, Alec*	Br. Chief	3S	3S	3S
Ledda, Madeleen*	Secretary II	3S	3S	3S
Shintani, Stacy	ITS IV	3S	3S	3S
Teruya, Terry	EHS IV QA/QC	3S	3S	3S
<b>Engineering:</b>				
Pascua, Noralin***	Office Assistant III	6F	6F	
Lum, Darryl	Engr. Sup VI	12S		
Tomomitsu, Mark***	Engr. V	12F		
Chen, Edward	Engr. V	12S(401WQC)		
Sumida, Shane	Engr. V	12S		
Poentis, Kris	Engr. V	12S		
Migita, Reef***	Engr. V	12F		
Rossio, Marianne***	Engr. V	12F		
Fouse, Jiaping***	Engr. III	12F		
Vacant***	Engr. IV	12F		
<b>Compliance:</b>				
Takemoto, Jen***	Office Assistant III		12F	
Tsuji, Michael	Sup-EHS V		12S	
Miyashiro, Scott***	EHS IV		12F	
Weaver, Stefanie	Engr. III		12S	
Tanimoto, Jamie***	EHS IV		12F	
Kurano, Mathew***	EHS IV		12F	
Vacant***	EHS IV		12F	
<b>Monitoring:</b>				
Okubo, Watson	Sup-EHS V			12S
Murakawa, Scott*	EHS IV			9S
Asakura, Roland*	EHS IV			9S
Furukado, Clifford*	EHS IV			9S
Ueunten, Gary*	EHS IV			9S
Mikami, Dale**	EHS IV			12F
Mukai, Neil**	EHS III			12F

Tubal, Randee***	TMDL Coord.		12F	
Doi, Jennifer***	EHS IV		12F	
Honda, Myron***	EHS IV		12F	

<b>Environmental Planning Office</b>				
McIntyre, Laura***	Planner VI	0.9F		
Hijirida, Linda***	Secretary II	0.9F		
Sakamoto, Maile***	PPC	0.9F		
<b>Environmental Resources Office:</b>				
Sasaki, Pat***	PHAO IV	1F		
Yamaguchi, Gordon***	Acct. III	1F		
Jacobson, Steven***	Hearings Officer	1F		
<b>Environmental Management Division</b>				
Vacant***	QA EHS IV	1.2F		
Magata, Kathi, "KC"***	DPSA IV	1F		
Vacant***	Office Assistant III			

\* 75% Base 106 and 25% NPS grant. \*\* 100% BEACH grant \*\*\*100% Base 106



## **NARRATIVE**

### **Overview:**

For FY 2013, the CWA Section 106 grant Water Pollution work plan focuses on permitting, enforcement and water quality monitoring.

### **Permitting:**

FY2013

The priority for the Permitting Program will be to issue major and minor permits in accordance with the NPDES Permit Issuance Schedule (Attachment 2); re-issue/administratively extend approximately 1300 existing Notice of General Permit Coverages (NGPCs) that will expire in October 2012; and continue the development and implementation of methods to streamline the NPDES Permit and Section 401 WQC issuance processes. The permit issuance streamlining methods include development of online electronic NPDES Permit and Section 401 WQC applications in the Environmental Health Administration e-Permitting Portal; integrating these online electronic applications with the Water Pollution Control (WPC) information management system; development of an internal consistency document; coordinating permit reviews and inspections with the Enforcement and Compliance Section; issuing NGPCs for pesticide discharges to State waters under the proposed Pesticide General Permit; issuing NGPCs for storm water discharges associated with construction activities to Class 1 and Class AA waters under the proposed General Permit for Discharges of Storm Water Associated with Construction Activities; and providing a blanket Section 401 WQC for certain Army Corp of Engineers 2012 Nationwide Permits.

### **Enforcement and Compliance:**

FY2013

The priority for the Enforcement and Compliance Section will have 50% of major facilities, 20% of minor facilities, 10% of NGPC facilities (industrial stormwater and Phase I construction stormwater); and 5% of Phase II construction stormwater are to be inspected. The State will continue to follow-up on all active consent decrees which include: County of Maui, Hawaii Department of Transportation, and City and County of Honolulu (CCH) consent decrees (CD) which include reviewing and commenting on CD submittals and follow-up inspections. Continue working on NetDMR to allow the CCH to submit their Discharge Monitoring Report (DMR) data electronically to ICIS via NetDMR. Hawaiian Electric Company's six (6) facilities

are currently submitting DMR data electronically to EPA and DOH via NetDMR. Several of the individual major facilities (some of which includes CCH, Hawaii American Water Company, Pearl Harbor Naval Shipyard, and NAVFAC Hawaii Wastewater Treatment Plant) and several individual minor facilities are testing NetDMR and will hopefully be able to submit electronic DMR data by the end of fiscal year 2013.

### **Water Quality Monitoring and Assessment:**

#### **FY2013**

Top priority of the Monitoring and Analysis Section will be BEACH Monitoring and Notification, completion of the Lahaina Seep Sampling, qPCR and pharmaceutical projects at Hanalei, Nawiliwili, and Lahaina. The qPCR and pharmaceutical work will complement and further refine the nutrient and waste water source tracking methodology (Kualoa Protocol) of the CWB.

CWB will continue to work with the Division of Aquatic Resources (DAR) to the mutual benefit of both programs. CWB and DAR staffs have received EPA National Lakes Assessment (NLA) training and will complete the Hawaii portion of the NLA survey by end of 2012. CWB and DAR will participate in the Hawaii portion of the National Rivers and Stream Assessment to be held in FY2013 and FY2014.

CWB will continue collaborating with other agencies and organizations: United States Geological Survey (USGS), University of Hawaii (UH), John A Burns School of Medicine (JABSOM), Pacific Research Center for Marine Biomedicine, Surfrider Foundation Hawaii Chapters, and Hanalei Watershed Hui. CWB will also keep close ties with specific individuals such as: Dr. Alexamdria Boehm, Stanford University; Dr. Yuanan Lu, UH Office of Public Health Studies; Dr. Tao Yan, UH School of Civil and Environmental Engineering; Dr. Stephen Siefried, JABSOM; and Dr. Marek Kirs, UH Water Resources Research Center (WRRC).

### **Total Maximum Daily Load (TMDL):**

#### **FY2013**

The Clean Water Branch filled the TMDL Coordinator position in January 2012 and is moving forward with TMDL efforts by collaborating with other sections within the CWB and establishing positive working relationships with stakeholders. Future TMDLs will be developed by working closely with Polluted Runoff Control and permitting and by partnering with other government agencies at the state and county levels. We are currently in the process of meeting with the Hawaii State Department of Transportation, Highways Division and the City and County of Honolulu Department of Environmental Services, with the intent of inviting them to participate in future TMDL developments in areas where they may be affected.

The current status of previous TMDL contracts/efforts is briefly summarized below.

Kaelepulu: Contract deliverables provided by Clyde Tamaru in December 2011 and March 2012 are being assessed and inventoried. CWB has also recently loaned sampling equipment to Oceanit in order to provide additional data for the work they are currently conducting in Kaelepulu for the City and County.

Waikale: All data and modeling output developed by the CWB and its contractor, Northwest Hydraulics, has been submitted to the City and County of Honolulu to assist with TMDL development. DOH will review, comment and make necessary adjustments to the modeling products completed by the City and County before soliciting feedback from the U.S. Army and Navy. From there, DOH will work toward determining waste load allocations and load allocations.

TMDL efforts will focus on the Hilo Bay watershed for FY 13-14. The collection of background information should be completed by the end of FY 12. We are beginning to establish contact with some of the researchers involved in water quality research at UH Hilo and are planning to attend an annual Volcano Ecosystems meeting at UH Hilo in July 2012 to give a brief informal presentation describing CWB's plans to write TMDLs for the Hilo Bay Watershed. The informal meeting is usually attended by researchers, university faculty, and graduate students from various universities that are conducting research on the Big Island. This will provide an opportunity for opening dialogue with those involved in research in the Hilo area. In FY 13-14, resources should be allocated for additional data collection, analysis and water quality modeling for Hilo Bay and its tributaries.

## **Water Quality Standards**

FY2013

HAR 11-54 will be amended to allow the Test of Significant Toxicity (TST) for toxicity monitoring of effluents covered under NPDES permits, in addition to the existing test criteria. The general policy of water quality antidegradation will be amended to include antidegradation language consistent with the federal policy. Data from the Hawaii Health Survey will be evaluated for fish consumption in Hawaii. The data will be used to review and possibly update the numerical standards for toxic pollutants in HAR 11-54-4. The Clean Water Branch Quality Assurance Program Plan (QAProgP) and related Quality Assurance Project Plans (QAPP) and Standard Operating Procedures (SOP) will be updated, finalized and submitted for EPA approval as needed.

## **303(d)/305(b) Integrated Report**

FY2013

For FY 2013, CWB will have an open call for data for the 2014 Integrated Report which will be closed October 2013. Throughout FY 2013, CWB will be collecting all data and reviewing the integrity. CWB will start assessing the data and comparing to our Water Quality Standards.

## **II PROGRAM WORK PLANS**

<b>A. Federal Grant Administration - CWA 106 (Surface Water)</b>					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<i>Federal Grant Administration</i>	<i>Timely award of federal grants</i>	<i>1) Draft work plan, consistent with proposed outcome format</i>	<i>April 2012, 2013</i>	CWB-A. Wong	
		<i>2) Grant negotiations</i>	<i>May 2012, 2013</i>		
		<i>3) Approved final grant application, work plan to EPA</i>	<i>June 2012, 2013</i>		
		<i>4) EPA award of grant</i>	<i>w/in 30 days of fund availability</i>		
	<i>Timely submittal of reports on workplan accomplishment and program outcomes</i>  <b><i>Outcome:</i></b> <i>Reports will be used to document satisfactory progress and issues needing further attention and funding in the next year work plan.</i>	<i>1) Quarterly and annual reports on all program outcomes and work plan activities (per specific program requirements)</i>	<i>Dec., March, June, September 2012, 2013, 2014</i>	All ERO/EMD (Manager/Sec)	FY13 Fiscal Sheet Page 1 of 18
		<i>2) Interim/Final FSRs within 90 day grant expiration.</i>	<i>Nov. 2013, 2014</i>	ERO	
		<i>3) Specific Program Reporting to be added for each program.</i>	<i>Annually, Dec. 31</i>	CWB staff	
		<i>4) Financial Terms and Conditions Reports, as appropriate.</i>	<i>Annually, Dec. 31</i>	ERO	

<b>B. NPDES Permits - Funded under CWA 106</b>				
<b>Goal 2: Safe and Clean Water</b> - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.				
<b>Objective 2.2: Protect Water Quality</b> - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.				
<b>Subobjective 2.2.1 Protect and Improve Water Quality on a Watershed Basis</b> - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)				
<b>State Program Indicators</b> (To be added by State)				
<b>HI PROGRAM OBJECTIVE NO. 1</b> <b>Control point source discharges through the issuance of appropriate NPDES permits to maintain the beneficial uses of the State receiving waters.</b> <b>HI PROGRAM OBJECTIVE NO. 2</b> <b>Certify that Section 404 permitted activities will not adversely impact the beneficial uses of the State receiving waters.</b>				
EPA/State Core Performance Measures	CWB Strategic Plan - Program Performance Objectives/Measures	Target	Due Date	Result, Date Done, Comments
Permitting Program Outcome/Output Measures	A. NPDES permit program:		Quarterly	
	1. Report # of individual NPDES permits issued.	A.1. See Attachment 2		
	2. Report # of Notices of General Permit Coverage (NGPCs) issued.	A.2. Varies with number of applicants		
Permitting Program Outcome/Output Measures	B. COE 404 permitted activities do not impair designated uses. 1. Report # of 401 WQCs certifications issued, waived, or denied.	B.1. Varies with number of applicants	Quarterly	

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Permitting	<p>Control point source discharges through the issuance of appropriate NPDES permits in order to maintain the beneficial uses of State receiving waters</p> <p><b>Outcome:</b> 90% or more of Hawaii's NPDES permits will be current</p> <p>EPA contractor assistance</p>	<p>FY13</p> <p>Re-issue two (2) major individual permits, re-issue seven (7) minor individual permits, re-issue/administratively extend approximately 1300 NGPCs, and issue three (3) new minor individual permits according to the Permit Issuance Schedule. (See Attachment 2.)</p>	9/30/2013	CWB-Engineering Section	<p>FY13 Fiscal Sheet page 1</p> <p>\$82,000 in-kind service request for permit development assistance from contractor.</p>
		<p>FY14</p> <p>Re-issue three (3) major individual permits, re-issue eleven (11) minor individual permits, and issue one (1) new potential major individual permit (Honolulu Seawater Air Conditioning, LLC) according to the Permit Issuance Schedule. (See Attachment 2.)</p>	9/30/2014		
		<p>In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to assist with NPDES permit development. It is more time-efficient for EPA rather than the State, to procure these contractual services. . \$82,000 in FY13).</p>	9/30/13		
		<p>EPA will provide for Hawaii DOH review and comment all in-kind contract support work orders to ensure the proposed tasks, milestones, and schedules provide a reasonably standardized approach to permit preparation and meet Hawaii DOH support needs. To the extent in-kind contract service work orders contain specific workplans and schedules concerning specific permit development tasks, Hawaii DOH staff will provide necessary permit related information and materials to contractors, and review and comment on contractor interim deliverables, in accordance with the schedules set forth in the contract work orders.</p>			

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		<p>If it is infeasible to meet the schedules established in the work orders, Hawaii DOH will notify EPA and the contractor immediately of any delays and its revised schedule for providing the necessary materials or review. EPA reserves the right to direct the contractor to complete permit development work products without benefit of reviews of interim deliverables if the State does not meet schedules for providing those reviews.</p> <p>Any permit still under development at end of previous fiscal year will be issued or reissued.</p>			
	To issue and update individual and general NPDES permits	<p>See Attachment 2 for FY 2013-14 Update 5 year plan in Attachment 2 annually Maintain and update inventory of industrial activities</p> <p>Develop and maintain a data base of industrial facilities claiming conditional "no exposure" exclusion from obtaining a storm water permit.</p>	<p>9/30/2013</p> <p>9/30/2014</p>		
	Public Notification	Provide public notification of construction storm water Notices of Intent for projects greater than 20 acres on the island of Hawaii in the Clean Water Branch's WEB site at <a href="http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html">http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html</a>			
	Wastewater Sludge	The State will add the agreed-upon sludge "boilerplate" monitoring/reporting language to all reissued NPDES permits and will also add, when requested and provided by EPA, specific language on a case-by-case basis.	As required		
	Public Notification	In addition to issuing Notices of Proposed Permit Issuance for individual permits and individual 401 Water Quality Certifications in the newspapers of the County where the discharge is located, the State will provide public notification in the Clean Water Branch's WEB site at: <a href="http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html">http://hawaii.gov/health/environmental/water/cleanwater/pubntcs/index.html</a>			



Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
	CAFO inventory	The State will update its AFO/CAFO inventory and permit CAFOs that are identified as having discharges to State waters. In addition, all permitted CAFOs will be required to have nutrient management plans and other applicable management measures as required in the effluent guidelines.	As required		
	Sec. 401 Water Quality Certification	The State will continue to implement a State Section 401 Water Quality Certification Program for applicants required to have a federal permit or license to construct in waters of the State.	As required		
	<p>Develop and Implement HI-NPDES Water Pollution Control (WPC) Database which will be compatible with EPA ICIS-NPDES system</p> <p>The HI-NPDES WPC database will provide a mechanism for more effective management of the NPDES program. It will support all business areas of the NPDES program, including the following:</p> <ul style="list-style-type: none"> <li>■ Permitting (Tracking and Issuance)</li> <li>■ Compliance Monitoring</li> <li>■ Program Management (Compliance Determination)</li> <li>■ Enforcement (Administrative, Criminal, and Judicial)</li> </ul>	<p>HI-NPDES WPC Database maintenance and improvement.</p> <p>Mobile field inspection application utilizes tablet devices in the field to gather, capture and transfer data in a consolidated fashion.</p>	<p>October 2012 to September 2013</p> <p>October 2012 to September 2013</p>	CWB	Federal 106 - \$20,000 (FY13)

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
	<p>The HI-NPDES WPC database will allow electronically submission of NPDES application, DMR and potential automatic electronic transmittal of data to EPA ICIS-NPDES system.</p> <p>The HI-NPDES database will provide for better QA/QC of data input and tracking.</p>				
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revision to the QAPP if any, follow the Quality Management Plan (QMP).	Ongoing as required	CWB	

<b>C. Monitoring - Funded under CWA 106</b>					
<b>Goal 2: Safe and Clean Water</b> - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.					
<b>Objective 2.2: Protect Water Quality</b> - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.					
<b>Subobjective 2.2.1: Protect and Improve Water Quality on a Watershed Basis</b> - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)					
<b>PROGRAM OBJECTIVE NO. 3 Enhance the ambient Water Quality Monitoring Program to identify impaired bodies and restore their beneficial uses.</b>					
Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<b>Emergency Response, Public Safety, and Surveillance Monitoring</b>	Protect the people of Hawaii and the environment through an appropriate WQ monitoring and warning system.  Public health and safety will be served and the environment will be protected.	1. Responses to treatment plant spills and bypasses and various other kinds of accidental or emergency discharge of pollutants to surface waters.	Ongoing	CWB Monitoring Section and Enforcement & Compliance Section	Fiscal Sheet Page 1 of 18
		2. Respond to polluted runoff events.		State Laboratories-Environment Branch	
		3. Complaints Response and Enforcement: respond daily to citizens' complaints of water quality problems in surface waters.			
		4. 401 WQC Compliance Inspections: attend pre-construction meetings; conduct compliance inspections; respond to citizens' complaints on construction projects.			

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<b>Core Monitoring of Surface Waters</b>	Monitor core set of long term stations identified by the 1999 edition of the surface water Quality Management Plan (QMP) and water quality assays of Hawaiian coastal waters. (See Comprehensive Monitoring Strategy for the State of Hawaii)  Sustained collection of historic water quality data in key locations.	Monitor core stations and major embayments on each island for the following parameters: Ammonia, Nitrate, Total N, Total P, Chlorophyll a, Silica, TSS  Core stations are: Oahu: Kaneohe, Pokai Maui - Kahului Hawaii – Hilo Kauai - Nawiliwili and Port Allen  Major embayments are: Kaneohe, Hilo, Nawiliwili, Port Allen, Kahului, and Pokai.  Monitoring data collected at long-term monitoring stations will be entered into STORET/WQX monthly.	On hold due to reduction in force	CWB-Monitoring Section  State Lab - Chem and Micro.	
<b>Data Analysis and Reporting</b>	Utilize modern technology to further the integration and availability of environmental data to all customers of DOH data.  All customers of DOH data will have easy access to information.	1. DOH will submit Draft FY2014 Integrated 303(d)/305(b) Report.  - Public review of draft report  - Final Report	April 1, 2014  April 1, 2014  June 30, 2014	CWB	Federal: 3- persons State: 4-persons

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		2. STORET data management input/output of data on all watershed projects, TMDLs, Integrated Report, etc.	Quarterly	CWB	
		3. NHD stewardship will edit high-resolution NHD data for Hawaii, which is available via USGS website.		RCUH-Geospatial Information Specialist	\$28,360 (FY13)
		NHD & GNIS Maintenance – Update feature names & coordinates	Sept 2013		
		Geo-referencing of State water quality assessment and impairment decisions	Sept 2013		
		Finalize assessment unit designations for State water quality reporting	Sept 2013		
		4a. Input 2012 Integrated Report entry in ADB.	12/30/2012	RCUH-Geospatial Information Specialist	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<b>Data Quality</b>	1) Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the CWB QAPP follow the Quality Management Plan (QMP).  Respond to May 2010 review by EPA QA Office of draft CWB QAPP.  Final CWB QAPP to EPA	Ongoing as required	CWB  CWB  CWB	
<b>Inland Waters</b>	<b>Collect and assess data on inland waters to determine water quality.</b>	National Lakes Assessment  National Rivers and Stream Assessment  Develop draft QAPP for inland waters include supporting SOPs  Submit final QAPP for inland waters and supporting SOPs	9/12  FY2013-14  3/31/13  60 days after receiving EPA QA Office review of draft	CWB Monitoring Section  CWB Monitoring Section  CWB Monitoring Section  CWB Monitoring Section	MI funds  MI funds

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<b>Watershed Assessments</b>	Collect and assess data on a watershed basis in an effort to determine sources of watershed pollution and develop means to improve water quality.  Improved water quality by watersheds.	Analyze existing and readily available surface water data and related information (e.g. complaints, spills, inspections), waterbody assessment priorities and listing criteria, and DOH program capabilities to prepare recommendations for:  a. Water quality sampling by the CWB Monitoring and Assessment Section;  b. Bed sediment and fish tissue sampling and fish risk assessments conducted by HEER, and CWB;  c. Assessments of stream habitat quality and biological integrity.  d. Water quality sampling (surface and ground) and SWAP enhancement to address Clean Water Act and Safe Drinking Water Act integration measures.  e. Achieving other assessment goals and objectives through volunteer monitoring, grantee monitoring (e.g. 319 projects), compliance monitoring (e.g. 401, NPDES, and SEP conditions), and third-party independent monitoring (e.g. academic and scientific research)	Ongoing	CWB Monitoring Section  State Lab.- Chem and Micro.	Federal: 3 persons
<b>Community Involvement</b>	Utilize community and regulated community input in developing environmental goals, objectives, statutes and rules to ensure that the public is educated, aware, and in synch with the environmental management programs.	Conduct public outreach and education activities to promote waterbody monitoring and assessment, data quality, and comparability of data with State water quality standards, and assist other DOH programs, government agencies, scientists, schools, community groups, and individuals with surface water data collection, analysis, and interpretation  Work with already existing organizations that affect policy (neighborhood boards, community association) to ensure public input. Promote Leadership in Energy and Environmental Design (LEED) programs and community-based social marketing.	Ongoing	EPO (Public Participation Coordinator)  CWB (Monitoring, Enforcement, PRC)	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<b>TMDL Development and Approval</b>  TMDLs under development:  Hanalei Bay watershed  Hilo Bay watershed  Kaelepulu inland waters  Pearl Harbor Streams: - Waiawa, Waimano (Middle Loch) - Kalauao, Aiea, and Halawa (East Loch)	Completion of TMDLs to provide scientific basis for load Allocation (LA) and Waste Load Allocation (WLA) that must be implemented to achieve WQS. All data collected for TMDL development will be entered into STORET or another appropriate electronic format.	1. HDOH contract with RCUH for Water Quality Assessment Project and TMDL Coordinator to support assessment of water quality impairments and Priority TMDL Development and CWA 604(b) work plans.	10/12-09/13	CWB	\$ 30,000 (FY13)
		2. Kaelepulu data collection by Clyde Tamaru being reviewed to determine if deliverables have been met.	09/13	CWB	
		3. TMDL Technical Specialist	09/13	CWB	
		4. Hilo Bay Watershed TMDL Development - Collect and analyze existing data - Identify criteria and uses - Identify data gaps - Identify and contact stakeholders - set up monitoring - determine contract or in-house monitoring	by 9/13	CWB	

## Water Quality Standards



<b>Goal 2: Safe and Clean Water</b> - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.					
<b>Objective 2.2: Protect Water Quality</b> - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.					
<b>Subobjective 2.2.1 Protect and Improve Water Quality on a Watershed Basis</b> - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Water Quality Standards	-Update the basic water quality criteria for toxic pollutants (HEER role for fish consumption criteria as well as ecological criteria).	CWB National Lakes Assessment and National Rivers and Streams Assessment	FY13-14	CWB	
	-Develop the strategic plan for development of Biocriteria for inland waters.		FY13-14	CWB	
	-Conduct internal, intergovernmental, and public education/outreach about the meaning and application of the WQS		Ongoing FY13-14	CWB	

<b>D. Compliance/Enforcement/Inspections - Funded under CWA 106</b>					
<b>Goal 5: Compliance and Enforcement Stewardship</b> – Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship.					
<b>Objective 5.1: Improve Compliance.</b>					
<b>Sub-objective 5.1.3 Monitoring and Enforcement.</b>					
<b>HI Program Objective No. 4 Ensure expeditious compliance with State Water Pollution rules.</b>					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
General Compliance	Achieve compliance rate of 98% for NPDES facilities	Implement the State's Annual Inspection Plan. Track and evaluate NPDES reported self-monitoring.  Take timely and appropriate enforcement action against violators	Ongoing.	CWB- Enforcement and Compliance Section, Attorney General's Office	Fiscal Sheet Page 1 of 18
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the QAPP follow the Quality Management Plan (QMP).  Respond to May 2010 review by EPA QA Office of draft QAPP.  Final CWB QAPP to EPA  Enforcement DMR draft QAPP has been submitted to EPA on March 2012. CSI QAPP will be submitted when CSI starts	Ongoing, or as required  5/1/2011  12/1/2011	CWB  CWB	

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
ICIS-NPDES	To perform data input into ICIS-NPDES in accordance with the procedures outlined in the 1985 OCS Quality Assurance Guidance Manual, and the December 28, 2007 ICIS Addendum to Appendix C of the PCS Policy Statement defining the minimum ICIS-NPDES data elements comparable to PCS WENDB and other system-required ICIS-NPDES data elements.	(1) Enter timely and accurate for all NPDES applications and permits consisting of all applicable information from enforcement orders issued by the DOH.	(1): Within 15 days of receipt.		
		(2) Enter NPDES inspection information for inspections conducted by the DOH.	(2): Within 30 days of the inspection.		
		(3) Enter effluent limits, monitoring and report requirements for NPDES permittees.	(3): Within 15 days of permit effective date.		
		(4) Generate and distribute "preprinted" Discharge Monitoring Reports (DMRs) for permittees.	(4): As necessary to keep permittees supplied.		
		(5) Enter timely and accurate NPDES DMR data as reported on the DMR forms by NPDES permittees.	(5): Within 15 days of receipt.		
		(6) Enter and maintain data for General permits and enrollees (new NOIs).	(6): Ongoing, or as required		
		(7) Meet the new data requirements for ICIS-NPDES including non-major, CAFO and SSO data.	(7): Ongoing, or as required		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		(8) Generate the automated QNCR report.	(8): Within 45 days of the end of the calendar quarter.		
		(9) Regularly perform QA checks for DMR data completeness on ICIS and follow up on missing data as needed. Report to EPA quarterly on DMR data completeness in ICIS-NPDES.	(9): Concurrent with the QNCR.		
		(10) Participate in EPA ICIS-NPDES workgroups.	(10): Ongoing, or as required.		
		(11) Participate in annual ICIS-NPDES meetings and trainings.	(11): Ongoing, or as required		
		(12) Enter into ICIS-NPDES applicable WENDB data for each formal or informal enforcement action taken against major and minor NPDES facilities, NGPC enrollees, and non-filers.	(12): within 30 days of issuance of enforcement action.		
		(13) Single Event Violation (SEV) data entry reporting, Informal enforcement action data entry reporting			

FY 2013-FY2014 CWA Base 106 Workplan  
Draft April 30, 2012

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Development of an Annual Inspection Plan to identify compliance problems. Region 9 may consider revising the measure of the State's inspection accomplishments if DOH demonstrates that extraordinary or unexpected circumstances prevent it from being able to carry out its workplan requirements. DOH will explain in detail such circumstances in writing. Such circumstances might include emergency response activities, work on major enforcement cases, or other reductions in staff available to carry out the required inspections.	<p>(1) Develop an inspection plan that is based on the state's environmental priorities and conforms with EPA's Compliance Monitoring Strategy (2/28/08). The plan shall provide that:</p> <p>A) For FY12 50% of the individual major permit enrollees (9 facilities), at least 20% of the traditional minor permit enrollees (6 facilities), at least 10% each of the total industrial storm water general permit enrollees (NGPC Appendix B (18 facilities) &amp; NGPC Appendix C Phase I (105 facilities; however, EPA and DOH have agreed upon 15facilities)), at least 5% each of the total storm water construction Phase II permit enrollees (2 facilities), and three (3) Phase II minor MS4s are to be inspected.</p> <p>B) A significant number (more than 50%) of the CEIs and CSIs to be conducted on major and minor permits shall be unannounced;</p> <p>C) Follow-up inspections are not to be counted towards the State's totals; however, the inspections will be entered into ICIS-NDPES.</p> <p>Inspections of traditional minor facilities shall be timed to be completed approximately 6 months before the NPDES permits are issued/renewed.</p> <p>Inspections shall be prioritized in the priority watersheds. All inspections performed in a designated priority watershed shall be noted/tracked in ICIS-NPDES.</p> <p>The inspection plan shall be submitted as an MS Excel spreadsheet that identifies, for each universe of inspection required under the CMS, the number of proposed inspections.</p> <p>Incorporate pollution prevention/waste minimization activities into inspections.</p>	<p>FY13 October 31, 2012</p> <p>FY14 October 31, 2013</p>		
Inspections	To verify compliance with all active NPDES permits, consent agreements and decrees.	(2) CCH, Hawaii Department of Transportation, and Maui County consent decrees: Inspect as needed to determine compliance with the consent decree.	Ongoing or as required		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		<p>(3) NPDES inspections will include, but not be limited to, the following activities concerning compliance with permit limitations and conditions:</p> <p>a) Verification of record keeping and reporting as outlined in Section 3 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>b). A physical inspection of the facility, including unit processes and operations and receiving water observations, as outlined in section 4.B of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>c). An evaluation of operations and maintenance programs as outlined in section 4.C of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>d). An evaluation of facility compliance sampling activities, including: adequacy of sampling, methodology and locations; sample preservation, containers and hold times; flow measurement; and compositing techniques, as outlined in sections 5 and 6 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>e). An evaluation of laboratory procedures (or verification of current lab certification) and laboratory quality assurance procedures (if analyses are done on site), as outlined in Section 7 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p>	On-going or as required		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Inspection Reports	(4) The inspection reports will discuss the findings related to all of the above activities and the field inspection notes will support all of the inspection report findings.			
		(a) Inspection reports shall be sent to EPA within 30 days of the inspection date, and shall be accompanied by a copy of the report transmittal letter to the permittee. Applicable WENDB data will be entered into ICIS-NPDES within the same time frame.	4(a) Ongoing, within 30 days of date of inspection.		
		(b) DOH shall report to the EPA after the end of the each quarter the following information relating to inspections conducted in the quarter:  (1) Identification of by name, permit number, permit type [i.e. major municipal, major non-municipal, major Federal, minor, construction storm water Phase I and Phase II (NGPC Appendix C), or other industrial storm water (NGPC Appendix B], and date of each NPDES facility inspected in the quarter;  (2) For each of the above indicated inspections indicate which were announced, unannounced, and whether inspections included sampling  (3) Copies of the inspection reports are to be included in the quarterly reports.  (4) Copies of quarterly reports are to be e-mailed to Region 9, CWA Compliance Office.	4(b) Quarterly, with a report due by the 15 <sup>th</sup> of the month following the quarter		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	EPA Contract Services	(5) In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to conduct compliance inspections of select POTWs and industrial facilities. It is more time-efficient for EPA rather than the State, to procure these contractual services. Time consuming joint enforcement actions prevent DOH from conducting these inspections. (\$82,000 in FY13). Inspections conducted by contractors to the State will count towards the State's totals.	Propose list of candidate inspections to EPA by 10/30/12. Complete all inspections by 6/1/13. All draft inspection reports to be submitted by the contractor to DOH by 6/30/13. All final inspection reports shall be transmitted to the facility (with copies to EPA) by no later than 9/30/13.	CWB Enforcement Section	\$82,000 (FY13) EPA in-kind assistance Refer to CWB Budget Details-Federal Funds (Budget Sheet page 13 of 18)



Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Compliance Assurance	To achieve and maintain high levels of compliance in the NPDES program to be tracked through ICIS-NPDES	(1) Prepare Quarterly Non-Compliance Reports (QNCR) via ICIS-NPDES for major dischargers. (a) No permit will remain in non-compliance for the same violation on two consecutive QNCR without: being returned to compliance, or Having timely and appropriate formal enforcement action taken against them consistent with the DOH enforcement procedures manual and penalty policy.	(1) Within 45 days of the end of each quarter		
		(2) Prepare quarterly list of other minor discharges that are in SNC.	(2) Within 45 days of the end of each quarter		
		(3) Review Discharge Monitoring Reports (DMRs) for accuracy and violations. All DMRs will be reviewed within 30 days of receipt.	(3) On-going, as DMRs are received		
		(4) Identify and list all major and minor NPDES facilities/permits	(4) Dec. 30		
		(5) Assist EPA in reviewing deliverables from the Hawaii Department of Transportation, CCH, and Maui County consent decrees.  Conduct appropriate follow-up activities as indicated by collection system evaluations conducted to date; Initiate appropriate responses to reported sewage spills	(5) As stipulated in the consent decrees		
		(6) Prepare and submit to Region 9 a response to EPA's quarterly Facility Watch List, as applicable and consistent with program guidance and SOP's	(6) Within 30 days of issuance of the Watch List to the State		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Enforcement	<p>1) To provide for the issuance of timely and appropriate enforcement orders and penalties required to achieve and maintain compliance consistent with DOH enforcement procedures and penalty policy.</p> <p>(2) To ensure compliance with all NPDES permits and active consent agreements and decrees.</p>	1) Take timely and appropriate enforcement actions on all applicable violations according to the Enforcement Section's procedures manual as revised to pursuant to (1) above. Initiate or continue enforcement actions on the following priority matters:	(1 a-b): On-going or as required (i.e. QNCR/ Watch List		
		(a) Take timely and appropriate enforcement actions on all dischargers on QNCR and/or Watch List.			
		(b) Continue to pursue formal enforcement actions against the following entities: Waimanalo Gulch Landfill			
		(c) Develop and implement, in consultation with EPA, an initiative to identify and take formal enforcement action against unpermitted industrial storm water dischargers (non-filers).	(1c): By September 30, 2012		
		(d) Take action against permittees that have not participated in the DMR/QA Program for two years.	(1d): As appropriate, or by September 30, 2012		
		All enforcement actions shall include assessment of an appropriate penalty, if any.			
		(2) Refer to EPA for appropriate action cases where: (a) upon issuance of a State Notice and Finding of Violation and Order, the violator files for a hearing on the matter and its return to compliance will be significantly delayed pending such a hearing and (b) DOH resource limitations preclude a timely and/or appropriate enforcement response.	(2): On-going or as required		
		(3) Incorporate pollution prevention projects into enforcement settlements where feasible.	(3): On-going or as required		
		(4) Review deliverables and reports from all enforcement cases as required by the respective consent decrees and discuss adequacy with EPA.	(4): On-going or as required		

Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Enforcement	(3) Reporting on compliance status and enforcement activities	(5) Report quarterly the total number of State equivalent actions to EPA Administrative Orders issued and the number issued to POTWs for not implementing pretreatment.	(5): Within 45 days of the end of each quarter		
		(6) Report quarterly the number of major facilities addressed by formal enforcement actions against municipalities that are not complying with their schedules.	(6): Within 45 days of the end of each quarter		
		(7) Report quarterly the active State civil case docket, the number of civil referrals sent to the Attorney General, the amount of civil cases concluded, penalties assessed and collected, and the number of criminal referrals.	(7): Within 45 days of the end of each quarter		
		(8) Report quarterly the number of pretreatment State civil referrals sent to the Attorney General, the number of criminal actions filed in State courts, the number of State cases filed, and the number of administrative penalty orders.	(8): Within 45 days of the end of each quarter		
		(9) Report to EPA on a quarterly basis the status of all cases/activities described in item (2) above.	(9): Within 45 days of the end of each quarter		
		(10) Identify at mid-year and end-of-year, the number of POTWs that meet the criteria for Reportable Non-Compliance (RNC) and identify which of those POTWs have had action taken against them, which resolved the violation. Report each action taken: technical assistance, permit/program modification, or formal enforcement. Report the compliance status (RNC, resolved, pending, resolved) of each POTW as of the end of the year.	(10): May 16, and Sept. 30		
		(11) Enter into ICIS-NPDES applicable WENDB data for each formal enforcement action (equivalent to EPA Administrative Orders and/or Administrative Penalty Orders) taken against major and minor NPDES facilities, NGPC enrollees, and non filers.	(11): within 30 days of issuance of enforcement action.		

<b>E. Training and Technical Assistance - Funded under CWA 106</b>					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Training and Technical Assistance	To assure appropriate training is available for CWB staff.	Attend the following meetings/workshops:  National Storm Water Coordinators Meeting (EPA)  Annual Meeting of the Association of Clean Water Administrator's (ACWA)  Hawaii Water Environment Association Annual Meeting (HWEA)  Water Environment Federation's Annual Conference and Exposition (WEF)  State/EPA Grant Negotiations for next fiscal year  NPDES Permit Writer's Workshop  ICIS-NPDES Meeting/Training  Exchange Network National Meeting  Hawaii Conservation Conference  National NPS Monitoring Workshop  National Water Quality Monitoring Conference  National Hydrography Dataset Conference  National TMDL Conference  Other appropriate workshops, meetings, trainings, or conferences as recommended by EPA	'13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14  '13, '14	CWB  CWB  CWB  CWB  CWB  CWB  CWB  CWB  CWB  CWB  CWB	FY13 State: Federal: \$60,800
	EPA contract services to provide TIE/TRE workshop for HDOH and permittees	In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to conduct TIE/TRE workshop for NPDES permittees. It is more time-efficient for EPA rather than the State, to procure these contractual services.	FY12	CWB	FY 13 Federal: \$14,000 for TIE/TRE workshop

<b>F. Public Participation - Funded under CWA 106</b>					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Public Participation	To meet public participation requirements and regulations and ensure public input on programs.	Conduct public hearings on rule changes.	Ongoing	CWB	State- 3.0
		Conduct public information meetings about proposed water quality assessment and TMDL decisions	Ongoing	CWB	Federal- 3.0
		Creation of a work/advisory group to discuss proposed rule changes, water quality monitoring, assessment methodologies, TMDL development and implementation, and Standards Revision	Quarterly	CWB	FY13 Federal \$9,000

## **ATTACHMENT 1 - Clean Water Branch (CWB) Monitoring Overview**

### **Monitoring Overview**

The goal of the monitoring program is to ensure that Hawaii's coastal waters are safe and healthy for people, plants, and animals, and to protect and restore the quality of Hawaii's streams, wetlands, estuaries, and other inland waters for fish and wildlife, recreation, aesthetic enjoyment, and other appropriate uses.

To pursue these goals, the CWB Monitoring & Analysis Section has heavily committed itself to Beach Monitoring in support of the BEACH Act of 2000, collaboration with Division of Aquatic Resources (DAR) staff in basic Water Quality Monitoring, work with the University of Hawaii, School of Earth Sciences and Technology in the EPA National Coastal Condition Assessment Program and Hawaii Ocean Observing System, and work with USGS in the development of Multi-tracer approach to Wastewater and Nutrient source tracking and its application at Kealekehe, Hawaii, and Kihei and Lahaina, Maui.

CWB continues to collaborate with Division of Aquatic Resources (DAR), Department of Land and Natural Resources on issues of water quality and protecting Hawaii's aquatic resources. CWB and DAR will participate in the EPA National Lakes Assessment Workshop and conduct the Hawaii portion of the national assessment.

The University of Hawaii, School of Earth Sciences and Technology (SOEST) invited CWB to collaborate in the Hawaii Ocean Observing System (HiOOS). HiOOS is a component of the Pacific Islands Ocean Observing System (PacIOOS), which is one of 11 regional observing systems in the U.S. Integrated Ocean Observing System (IOOS). PacIOOS is being coordinated by the University of Hawaii, SOEST in partnership with the East West Center, and the University of Hawaii, Sea Grant Program with funding from NOAA. The goal of HiOOS is to seek accurate, timely and reliable information about the coastal and open ocean waters of the Hawaiian Islands.

The CWB is also working with the UH, SOEST in the EPA National Coastal Condition Assessment (NCCA) Project to take place in the summer of 2010. This national monitoring project purpose is to generate statistically valid reports on the condition of the Nation's water resources and identify key stressors to these systems. 50 randomly sites across the State will be sample and assessed for: water quality, Chlorophyll-a, sediment, benthic macroinvertebrate assemblage, habitat, bacteria and fish tissue.

CWB is collaborating with Dr. Tao Yan, UH College of Environmental Engineering on a WERF supported project *Concentration Dynamics of Fecal Indicators in Hawaiian Coastal and Inland Sand, Soil, and Water During Rainfall Events*. CWB intends to support and expand Dr. Yan's project with \$150,000 from the Kualoa settlement.

CWB is also collaborating with Dr. Alexandria Boehm, Stanford University, College of Civil and Environmental Engineering. Dr. Boehm has provided training for Hawaii's labs in the processing of qPCR samples. Samples will be collected at Lahaina, Hanalei, and Nawiliwili, processed in Hawaii, and shipped to Dr. Boehm for final analysis. This study will help to determine the source of high bacteria levels and assist the CWB in making assessment decisions.

CWB has worked for several years on the development of multi-tracer approach to wastewater and nutrient source tracking with USGS. Elevated bacteria counts during beach monitoring at Kualoa Beach Park revealed non-operating septic systems at the restrooms of the park. A proof-of-concept approach was developed by USGS at Kualoa and the approach was used and refined at Kealahou, Kona to determine if the effluent from Kealahou WWTP is impacting Honokohau Harbor. The multi tracer approach was then used at Kihei and Lahaina, Maui to detect wastewater plumes from municipal injection wells in nearshore marine waters. The Kihei/Lahaina report was published by USGS in December 2009. CWB is fine tuning the approach with pharmaceutical and qPCR testing at the Lahaina seeps and high bacteria locations at Hanalei, Nawiliwili, and other beach locations on Kauai.

CWB Monitoring has responded to unplanned but high priority monitoring issues and will continue to do so. During the 48 million gallons Waikiki sewage spill, monitoring was conducted at surf sites, and other areas to compliment the C&C of Honolulu bacteria monitoring. After the Waipa Dam Failure, CWB sampled sediment and water in response to community concerns of toxic chemicals being washed into the stream and ocean. CWB Monitoring collaborated with USGS in monitoring effort to determine the fate of wastewater from Kealahou Treatment Plant, Kona, Hawaii, in response to a complaint filed with EPA Headquarters.

CWB continues to collaborate with major recreational water stakeholders of Hawaii including: ILH and OIA High School coaches, trainers, and athletic directors, Canoe organizations (OHCRA, Hui Waa, and Na Opio), Surfrider Foundation Chapters (Oahu, Kauai, and Maui), Hawaii Visitor and Convention Bureau, Waikiki Improvement Association, and various environmental groups.

Other tasks performed by monitoring include: response to sewage spills from private sources, stream monitoring, 303(d)/305(b) IR, TMDL, 401 WQC compliance inspections, watershed assessments, coastal monitoring, and special studies.

**FIELD INSTRUMENT TESTS:** Water samples will be collected by the CWB at each selected site during wet and dry seasons. The HydroLab® multi-parameter probe will be used; the instrument is capable of measuring temperature, pH, conductivity, and dissolved oxygen. For Beach monitoring: Hach® turbidity meter Model 2100P and HydroLab Quanta multi-parameter meter capable of reading dissolved oxygen, conductivity, salinity, pH and temperature.

**DOH LABORATORY ANALYSIS:** Water chemistry analyses are conducted at the DOH laboratory for physiochemical parameters listed in the State Water Quality Standards as well as silicate and ammonia nitrogen. Other analyses of interest (metals, toxics, bacteria) may be arranged on a case-by-case basis. Bacteria analyses to support the BEACH monitoring program are also conducted.

### **Water Quality Parameters**

#### **Field Analyses - Among the field analyses are the following:**

- temperature
- pH
- dissolved oxygen
- oxygen saturation
- oxidation-reduction potential
- salinity
- turbidity
- conductivity
- light intensity PAR

#### **Laboratory Analyses - Analyses conducted by the DOH laboratory includes the following:**

- nitrate-nitrite nitrogen
- ammonia nitrogen
- total nitrogen
- total phosphorus
- silicate
- total suspended solids



- bacteria (enterococcus and clostridium perfringens)
- chlor A
- qPCR filtering
- 

### **STORET Data Management**

The CWB will input all sampling data into STORET via WQX on a monthly basis. The STORET repository will be the main source of data available to the public, and will also be the main source of marine data for the 305(b) and 303(d) reports. CWB maintains its own website which also has the capability for downloads of sampling data for the public.

**ATTACHMENT 2 – NPDES Permit Issuance Schedules**

**PERMIT ISSUANCE SCHEDULE - FY-2013**

**First Quarter (October 2012 - December 2012)**

- |  |            |
|--|------------|
| 1. Yacht Harbor Towers AOA   | HI 0020346 |
| 2. Honolulu Marine (new location)  | HI 0021835 |
| (HI 0021835 application may be withdrawn due to Department of<br>Transportation rescinding their request to change the drydock location) |            |

**Second Quarter (January 2013 - March 2013)**

- |   |            |
|---|------------|
| 3. Agribusiness Development Corporation   | HI 0000086 |
| 4. Halfway Bridge Rock Quarry and Crusher | HI 0020842 |
| 5. AES Hawaii Inc.                        | HI 0021130 |

**Third Quarter (April 2013 - June 2013)**

- |  |            |
|--|------------|
| 6. Maui Ocean Center                           | HI 0021504 |
| 7. Ameron Hawaii Sand Island Facility          | HI 0021075 |
| 8. Island Dairy (new CAFO, no application yet) |            |

**Fourth Quarter (July 2013 - September 2013)**

- |  |            |
|--|------------|
| 9. Kailua Regional Wastewater Treatment Plant*                                   | HI 0021296 |
| 10. Wailua Wastewater Treatment Plant*   | HI 0020257 |
| 11. PHNSY& IMF Dockside Chlorinator Units and<br>Chlorinator/Dechlorinator Units | HI 1120801 |
| 12. Hukilau Foods (new)  | HI 0021829 |

\*MAJOR FACILITIES

**PERMIT ISSUANCE SCHEDULE - FY 2014**

First Quarter (October 2013 - December 2013)

- |   |            |
|---|------------|
| 1. East Honolulu WWTP*  | HI 0020303 |
| 2. Kapaa Sanitary Landfill and Transfer Station                       | HI S000100 |
| 3. Hawaii Army National Guard Maintenance Shops and Small MS4 on Oahu | HI S000052 |

Second Quarter (January 2014 - March 2014)

- |                                    |            |
|------------------------------------|------------|
| 4. Kahului Generating Station*     | HI 0000094 |
| 5. Topa Financial Center           | HI 0021768 |
| 6. Hawaiian Cement – Halawa Quarry | HI 0000558 |
| 7. US Army Garrison Hawaii (MS4)   | HI S000090 |

Third Quarter (April 2014 - June 2014)

- |  |            |
|--|------------|
| 8. Napili Well “A” GAC   | HI 0021661 |
| 9. Keahole Point Fish, LLC   | HI 0021825 |
| 10. Ala Wai Harbor, Waianae Harbor, Keehi Harbor/Lagoon, Sand Island<br>Launch Ramp Facility, Heeia Kea Harbor, Haleiwa Harbor (Small MS4) | HI S000009 |

Fourth Quarter (July 2014 - September 2014)

- |  |            |
|--|------------|
| 11. Marine Corps Base Hawaii Kaneohe Bay Water Reclamation Facility* | HI 0110078 |
| 12. Marine Corps Base Hawaii-MS4                                     | HI S000007 |
| 13. US Air Force 15th Civil Engineering Squadron                     | HI S000069 |
| 14. Honolulu International Airport Small MS4                         | HI S000005 |
| 15. Honolulu Seawater Air Conditioning, LLC (new)                    | HI 0021842 |

\* MAJOR FACILITIES

**PERMIT ISSUANCE SCHEDULE - FY 2015**

First Quarter (October 2014 - December 2014)

- |  |            |
|--|------------|
| 1. Naval Information Operations CMD Hawaii | HI 1121156 |
| 2. Papaikou-Paukaa WWTP                    | HI 0021113 |

Second Quarter (January 2015 - March 2015)

- |                                       |            |
|---------------------------------------|------------|
| 1. Maalaea Generating Station         | HI S000004 |
| 2. Kahala Hotel & Resort              | HI 0021300 |
| 3. Hawaii Institute of Marine Biology | HI 0021644 |

Third Quarter (April 2015 - June 2015)

- |                             |            |
|-----------------------------|------------|
| 4. Kaunakakai Bulk Terminal | HI 0020966 |
| 5. Oahu Schools Small MS4   | HI S000003 |

Fourth Quarter (July 2015 - September 2015)

- |   |            |
|---|------------|
| 6. Department of Agriculture Small MS4      | HI S000088 |
| 7. DAGS Small MS4 and Industrial Facilities | HI S000089 |

\*MAJOR

**PERMIT ISSUANCE SCHEDULE - FY-2016**

First Quarter (October 2015- December 2016)

1. Lanai Oil Company	HI 0020958
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Second Quarter (January 2016 - March 2016)

2. Sunrise Capital, Inc.	HI 0021654
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Third Quarter (April 2016 - June 2016)

3. Grove Farm Water Treatment Facility	HI 0021824
4. Waianae Wastewater Treatment Plant*	HI 0020109
5. Mahaulepu Quarry	HI 0021491
6. City and County of Honolulu MS4*	HI S000002
7. Kulaimano Wastewater Treatment Plant	HI 0020770
8. Marisco, Ltd.	HI 0021786
9. Ewa Shaft GAC Treatment Facility (new)	HI 0021830

Fourth Quarter (July 2016 - September 2016)

10. Ameron Hawaii Kapaa Quarry	HI 0020796
11. NAVFAC Wastewater Treatment Plant*	HI 0110086
12. Shipman Generating Station*	HI 0000264

\*MAJOR FACILITIES

**PERMIT ISSUANCE SCHEDULE - FY-2017**

First Quarter (October 2016 - December 2017)

- |   |            |
|---|------------|
| 1. Haleiwa Wells GAC Water Treatment Facility | HI 0021839 |
|---|------------|

Second Quarter (January 2017 - March 2017)

- |  |            |
|--|------------|
| 2. Hawaii Oceanic Technology Inc – Ahi Aquaculture Project (new) | HI 0021840 |
|--|------------|

Third Quarter (April 2017 - June 2017)

- |  |            |
|--|------------|
| 3. Pacific Shipyards International, LLC              | HI 0020753 |
| 4. Waikiki Aquarium                                  | HI 0020630 |
| 5. Hilo Wastewater Treatment Plant*                  | HI 0021377 |
| 6. General Permit for Discharges of Pesticides (new) |            |

Fourth Quarter (July 2017 - September 2017)

- |   |            |
|---|------------|
| 7. Kahe Generating Station*                         | HI 0000019 |
| 8. Waiiau Generating Station*                       | HI 0000604 |
| 9. Port Allen Generating Station*                   | HI 0000353 |
| 10. Schofield Barracks Wastewater Treatment Plant*  | HI 0110141 |
| 11. Honolulu Generating Station*                    | HI 0000027 |
| 12. Chevron Products Company Hawaii Refinery*       | HI 0000329 |
| 13. DOT-Highways MS4*                               | HI S000001 |
| 14. Pearl Harbor Naval Shipyard & IMF Drydocks 1-4* | HI 0110230 |
| 15. Sand Island Wastewater Treatment Plant*         | HI 0020117 |
| 16. Honouliuli Wastewater Treatment Plant*          | HI 0020877 |

\* MAJOR FACILITIES

### **ATTACHMENT 3 - Watershed Assessments/TMDL Program Plan**

#### **1. Program Objectives/Outcomes**

A new TMDL Coordinator has been hired by the Clean Water Branch. In a re-organization move, TMDL, 303(d)/305(b) IR, and WQ Standards have been moved from the Environmental Planning Office (EPO) to the CWB, Monitoring and Analysis Section. We are checking up on contracts written by past TMDL Coordinator and making sure that deliverables have been delivered and/or a status of work is report. An inventory of equipment and its location has been completed.

The Kaelepulu contract (Conduct Water Quality Research and Extension Service for TMDL Development-Kaelepulu Watershed) is behind schedule and we are in contact with principle investigator, Clyde Tamaru, UH. Mr. Tamaru is following up on his deliverables.

The EPO stored their TMDL associated equipment at Bldg 4, Waimano Ridge near the DOH Laboratory. In March 2012, all equipment was moved to the CWB baseyard at Waimano Ridge. There were a lot of ISCO samplers that were sitting idle and some had Bob Bourke, Oceanit labels on them. Rather than have these equipment sitting idle, we decided to loan Oceanit the samplers for upcoming work for the City and County of Honolulu. Their plan is to use the equipment to supplement their own for watershed water quality runoff studies. By having a large number of samplers they will be able to canvas all critical areas within a watershed to better identify the specific sources of pollutants. We ask that data obtained be shared with CWB and it was agreed. The samplers were originally bought by Oceanit with contract funds from EPO for work on another completed project. At the end of the contract, equipment was turned over to EPO.

Due to RIF in the CWB Monitoring Section, TMDL Program will always look for opportunities to share resources to produce monitoring data for mutual use. The collaboration with Oceanit is the first occasion where DOH idle equipment is being used to generate data for TMDL development. More such collaborations will be pursued in the future.